

LADWP Power Strategic Long-Term Resource Plan (SLTRP)

Advisory Group (AG): Meeting #4

Friday, October 22, 2021

10:00 am – 12:15 pm

Zoom Platform (Virtual)

Meeting Summary (Draft)¹

Attendees:

Advisory Group Members/Observers

1. California Energy Storage Alliance (CESA), Jin Noh
2. Center for Energy Efficiency and Renewable Technologies (CEERT), John V. White
3. City of Los Angeles – Climate Emergency Mobilization Office, Marta Segura
4. City of Los Angeles – Council District 02, Councilmember Paul Krekorian, Aaron Ordower
5. City of Los Angeles - Council District 03, Councilmember Bob Blumenfield, Jeff Jacobberger
6. City of Los Angeles - Council District 13, Councilmember Mitch O’Farrell, David Giron
7. City of Los Angeles – Office of the Chief Legislative Analyst (CLA), Blayne Sutton-Willis
8. City of Los Angeles – Office of the Chief Legislative Analyst (CLA), Rafael Prieto
9. City of Los Angeles - Office of the City Administrative Officer (CAO), Sarai Bhaga
10. City of Los Angeles - Office of the Mayor, Paul Lee
11. City of Los Angeles - Office of Public Accountability (OPA), Frederick Pickel
12. Food and Water Watch, Jasmin Vargas
13. Los Angeles Business Council (LABC), Adam Lane
14. Los Angeles Business Council (LABC), Arielle Lopez
15. LADWP Advocacy Committee, Jack Humphreville
16. LADWP Board of Commissioners, Mia Lehrer
17. LADWP Memorandum of Understanding Oversight Committee, Tony Wilkinson
18. Los Angeles Unified School District (LAUSD), Christos Chrysiliou
19. National Resources Defense Council (NRDC), Amanda Levin
20. Neighborhood Council Sustainability Alliance (NCSA), Dan Kegel
21. Neighborhood Council Sustainability Alliance (NSCA), Ravi Sankaran
22. Pacoima Beautiful, Felipe Escobar
23. Port of Los Angeles (POLA), Carlos Baldenegro
24. Sierra Club, Francis Yang
25. Sierra Club, Katie Ramsey
26. Southern California Gas Company (SoCalGas), Jonathan Peress
27. University of California, Los Angeles (UCLA), Bonny Bentzin
28. University of Southern California (USC), Zelinda Welch
29. Water and Power Associates, Bill Engels
30. Water and Power Associates, William Barlak
31. Bryan A. Cope Program Dev. Mgr.
32. Vj

¹ This summary, prepared to the best ability of the notetakers, is provided as synopsis of the meeting for review of topics covered, and is not intended to represent an official record or transcript of all matters presented or discussed. Not all attendees may be reflected due to early log-offs, no self-identification, and other factors.

33. KAYA
34. Carlos
35. Lisa
36. 1213****794
37. 1213****039
38. 1415****856

LADWP Staff

1. Stephanie Spicer
2. Jay Lim
3. Carol Tucker
4. Dawn Cotterell
5. Jesse Vismonte
6. Robert Hodel
7. Yamen Nanne
8. Glenn Barry
9. Kyle Tran
10. Linda Novoa
11. Robert P. Gonzalez
12. Alan Hwang
13. Arash Saidi
14. Armen Saiyan
15. Bernardo Perez
16. Daniel Beese
17. David Jacot
18. Faranak Sarbaz
19. Hassan Motallebi
20. James Barner
21. Jason Rondou
22. Jimmy Lin
23. John Levy
24. Julie Van Wagner
25. Kai Choi
26. Lister Yu
27. Louis Ting
28. Luke Sun
29. Michael Buck
30. Roberto Sarmiento
31. Stephen Ruiz
32. Zaw Htin
33. Deborah Hong
34. Melanie Kwong
35. Paul Habib
36. Bob Yazdanpanah
37. Vida Daneshmand
38. Luis Martinez

Project Team

1. Joan Isaacson, Kearns & West (Facilitator)
2. Alyson Scurlock, Kearns & West (Polling)
3. Christian Mendez, Kearns & West
4. Jasmine King, Kearns & West
5. Brady Cowiestoll, National Renewable Energy Laboratory (NREL)
6. Brandon Mauch, Ascend Analytics
7. Zach Brode, Ascend Analytics

Note: The meeting presentation slides are posted at ladwp.com/sltrp.

1. Welcome and Introductions

- Joan Isaacson, meeting facilitator from Kearns & West, welcomed the Advisory Group (AG) to Meeting #4.

2. Meeting Purpose and Agenda Overview

- Isaacson provided a brief overview of the day's agenda, including LADWP presentations on Customer Programs such as energy efficiency and building electrification, transportation electrification, and demand response. Also on the agenda was presentation of a draft scenario matrix for the 2022 SLTRP, as well as an opportunity for breakout room discussions for the AG.

3. Energy Efficiency and Building Electrification Programs

- David Jacot, LADWP Director of Energy Efficiency Solutions, presented on energy efficiency and building electrification programs at LADWP. Jacot referenced the LA100 Study results calling for robust electrification (transportation and buildings) to achieve the lowest cost pathway, in addition to demand reduction and flexibility through energy efficiency to help counteract the tremendous amounts of generation and storage projects required, as well as transmission, distribution, and substation upgrades to achieve 100% carbon-free by 2035.
- The LA100 Study estimated that approximately ~\$50 billion to ~\$80 billion in investments (in addition to existing debt and programs like the Power System Reliability Program) will be required to fund pathways to 100% carbon-free by 2035, however, if done successfully, electric rates may only increase as the same rate as inflation.
- Jacot explained that from 2010-2020, LADWP doubled energy efficiency in the City of Los Angeles, by achieving 15% in cumulative savings, which resulted in less load (kWh) that LADWP would have otherwise had to serve. From 2020-2030, LADWP is doubling its percentage of energy efficiency once again, to achieve an additional 15% in cumulative savings by 2030, per Senate Bill 350. By 2035, LADWP's energy efficiency savings are projected to be in line with the LA100 projections, resulting in roughly ~400 GWh in savings/year.
- An overview of LADWP's portfolio of energy efficiency programs was also presented, showing mass market residential programs like the Home Energy Improvement Program, in addition to commercial, industrial, and institutional programs like the Commercial Lighting Incentive Program.
- A new program, the Comprehensive Affordable Multifamily Retrofits (CAMR) program, was also discussed by Jacot, who outlined how it will promote deep decarbonization of multi-family

buildings by retrofitting for energy efficiency, building electrification, and on-site photovoltaic solar, serving as a “one-stop shop” for the customer. The idea is to reduce energy use, electrify where it makes sense, and increase onsite solar to reduce energy consumption from the grid. Furthermore, significant utility cost savings are expected for low income tenants and affordable housing property owners and managers, in addition to providing skilled, family-supporting green jobs for the local workforce.

- Jacot concluded by showing a chart with the greenhouse gas emissions inventory for the State of California, broken down into the following sectors: transportation (41%), industrial (23%), electricity – in-state (10%), agriculture (8%), residential (7%), electricity imports (6%), commercial (5%), and not-specified (<1%). Jacot explained that while the operating costs are already launching and well-accepted for transportation electrification, building electrification will have different challenges, however more must be done to enable electrification and ultimately help mitigate upwards pressure on electric rates.
- Major Themes from Advisory Group Member Discussion and Questions
 - LADWP needs more ambitious plans, we can do better than what seems like the bare minimum. This does not seem like an aggressive path.
 - *A: Forecasting 15 years out is as much an art as it is science. We have a better grasp of the near future, but what we see today 15 years out is just a snapshot. Can we do more, specifically within the customer sector? We think so, hope so, and are working on it.*
 - Are building electrification programs and heat pump incentivizing part of CAMR or are they addressed separately?
 - *A: The CAMR program will launch over subsequent months and it will have building electrification as well as appliances built into it. It will be our first foray into building electrification. In parallel, we have been developing building electrification measures for our rebate programs and hope to introduce those measures in parallel with the launch and ramping up of CAMR.*
 - Over time, will we see a program in place for each of the different building sectors? Also, is there a term sheet out there for CAMR, and do we know what percentage of cost CAMR will cover?
 - *A: Generally, state-level coverage is from 30%-70%, and we have adjusted the incentive upwards to maintain this range, given we added the requirement for the prevailing wage.*
 - Interest regarding levels of funding for CAMR.
 - Does this program provide subsidies for RSO (Rent Stabilization Ordinance) owners, where most low-income Angelenos live, and landlords have no ability to pass these costs onto tenants?
 - *A: CAMR will be working with its sister program, the Home Energy Improvement Program (HEIP). HEIP is free to the customer and owner, and can help out a lot with small stabilized units, but may be limited to smaller projects.*
 - Concerns regarding greenhouse gas emissions attributed to the buildings, and interest in electrification-friendly rates to ensure customers achieve bill savings after building electrification, similar to electrification incentives currently offered by the investor-owned utilities.
 - Interest in the guarantees, if any, for rates not increasing more than inflation; the

importance of overall utility bills over simply electric rates; and fuel switching incentives.

- Desire to see HEIP expanded to cover more Angelenos, as well as fuel switching appliances.
- Desire to see the LADWP rebate process become easier for the consumer, as well as easing of the red tape to make it easier for everyday people and affordable housing owners.
- Desire for speedier action to implement programs such as energy efficiency, as well as thinking beyond greenhouse gas emissions and electric savings but also about equity, subsidies, and lower bills.

4. Transportation Electrification Programs

- Yamen Nanne, LADWP Manager of Distribution System Development and Reliability, gave an overview of LADWP's electric transportation programs. Nanne explained that electric vehicle adoption projections in both LA100 load scenarios (moderate and high) were in line with the previous governor goals. The moderate load scenario reached about 580,000 electric vehicles by 2030, and the high load scenario followed the 2017 SLTRP levels of high transportation electrification, and then ramped up much more aggressively after 2028.
- With respect to load projections from transportation electrification, by 2045, the LA100 moderate load projections were expected to reach a peak charging load of nearly ~1,000 MW (and an electric consumption of 4,000 GWh), in comparison to the high and stress load scenarios which were expected to reach ~2,000 MW (and an electric consumption of ~10,500 GWh) and ~2,800 MW (and an electric consumption of ~11,000 GWh) respectively. With respect to charging, the stress load scenario assumes more direct-current fast charging (DCFC), as opposed to more Level 2 charging in the case of the high load scenario.
- Nanne proceeded to outline the State of California's latest zero-emissions vehicle goals, including Governor Newsom's Executive Order N-79-20 that requires vehicle dealers to end sale of new fossil fueled light-duty passenger vehicles by 2035, and to electrify freight trucks by 2035 and medium-and heavy-duty fleets by 2045. Another State goal discussed was Assembly Bill 2127 (EV Charging Infrastructure Assessment) which as a baseline, calls for 1 million public and shared EV chargers to support 5 million electric vehicles by 2030, upon which the California Air Resources Board projected that ~1.2 million chargers will be needed for ~7.5 million electric vehicles in the State by 2030.
- In line with the new State goals, Nanne outlined LADWP's revised electric transportation goals, including 250,000 light-duty and 4,000 medium-and heavy-duty electric vehicles by 2025, 55,000 light-duty electric vehicles by 2028, and 750,000 light-duty and 12,000 medium-and heavy-duty electric vehicles by 2030. With respect to charging infrastructure, LADWP aims to support 45,000 charging stations by 2025 (including 1,000 direct-current fast chargers), and 120,000 charging stations by 2030 (including 3,000 direct-current fast chargers). These goals are also in line with electrification goals for City and transit fleets including Mayor Garcetti's Executive Directive No. 25 (L.A.'s Green New Deal: Leading by Example) which calls for the procurement of all new City light duty sedans in 2021 to be zero-emission vehicles, and for 100% of the City's bus fleet to be zero-emissions by 2028 (where technically feasible). To date, the City of Los Angeles has ~13,000 electric vehicle chargers, exceeding the 2022 target for 10,000 commercial electric vehicles by about two years. While there is still a long way to go to

reach the revised goal of 750,000 light-duty electric vehicles by 2030, if the resources and funding are behind the goal, Nanne expressed confidence that this is achievable for Los Angeles.

- With respect to greenhouse gas emissions reductions, incentivizing the transportation to switch from fossil fuels to zero-emission fuels will drastically help decarbonize the economy. By 2035, the over 1 million zero-emission vehicles in the City of Los Angeles are expected to result in about ~7,000 GWh of increased electric sales, helping reduce about ~5 million metric tons of greenhouse gases.
- Initiatives and strategies outlined by Nanne, included preparing the electric grid, developing customer incentives, City partnerships, direct deployment, increasing equitable access to public charging, and targeted education, marketing, and outreach campaigns. Current commercial rebate programs include up to \$4,000 per Level 2 charging station, with a \$1,000 adder in disadvantaged communities, up to \$75,000 per Direct-Current Fast Charger, and up to \$125,000 per charging station for medium-and-heavy-duty vehicles. Current residential rebate programs include a \$1,500 used EV rebate and a \$500 Level 2 charger rebate, with additional equity adders currently being proposed for consideration.
- Major Themes from Advisory Group Member Discussion and Questions
 - What role is projected/assumed for active transportation, including e-bikes, to reduce total demand from transportation sector? What assumptions do you make regarding the vehicle mix (e.g., large SUVs vs. compact cars)?
 - *A: We have not factored that in yet at this point, but we are developing an EV master plan in collaboration with other City departments and we will be looking at looking at those sectors and see if there are funding opportunities. Recently we awarded nine community grants and one of them included electrified bicycles that will be shared with community.*
 - Given LA Metro and LAUSD's goals to electrify buses by 2030, is LADWP working with them to create charging infrastructure that can support vehicle-to-grid technology and programs?
 - *A: Absolutely yes, we have been working with the Los Angeles Department of Transportation (LADOT) and awarded a memorandum of understanding to install charging stations and help support the electrification of their bus fleet. This will include vehicle-to-grid components in the future.*
 - Concerns that some EV infrastructure developers report they cannot place EV fast chargers on the 4.8 kV distribution grid and are restricted to the 34.5 kV grid.
 - Which customers will utilize the EV fast chargers?
 - *A: Right now by design, they are meant for the public. Anybody who lives near charging stations and even commuters, multi-family dwellers, can use them. One of LADWP's direct-current fast chargers is at the LA Zoo and is one of top 5 used in all of CA.*
 - Interest in the capability of measuring utilization of EV public chargers, how that factors into determining EV charger deployment, what the life cycles are for the various types of EV charging stations, and the sources for funding.
 - Shared anecdotes of using EV fast chargers for long trips and for those without access to home charging.
 - Do people using public fast chargers pay for their electricity, if so, at what rate?
 - *A: Yes, the majority of direct-current fast chargers are owned by private*

industries. The three major companies have different business models (some charge money per kWh, other per minute or dynamic, as well as flat rates). For the charging stations owned by LADWP, we are not currently charging money because we use low-carbon fuel standard credits to fund this as well as new installations.

- Questions on when the EV Master Plan will be ready, and a desire to do a tour of local EV charging stations.
- Is LADWP working with the Port of Los Angeles to ensure that both freight and heavy-duty trucks have strategic charging stations?
 - *A: Yes, we also have a memorandum of understanding in place with the Port of Los Angeles from about two years ago, and we work very closely with them. They submitted a very large plan to electrify drayage trucks, cranes, other equipment, as well as charging stations. We are working very closely with them and will conduct studies for power requirements to electrify very large portions of the Port in the near term.*
- Equity concerns regarding deployment of EV chargers in low-income and multi-unit neighborhoods.
- Questions regarding deployment of Level 2 chargers versus fast chargers for multi-unit dwellings, and the tradeoffs.
 - *A: The large majority of charging stations (97%) targeted for multifamily are L2. Direct-current fast charging will be supplemental for those multi-family units that are not able to install charging either due to their electric service limitations or due to the landlord refusing to host charging in the common areas.*

5. Demand Response Programs

- Hassan Motallebi (LADWP manager of Demand Response Programs), Zaw Htin (Program Lead), and Linda Novoa (Program Engineer), presented to the AG on LADWP's demand response programs.
- Abbreviated as "DR", demand response was explained to be a change in electric load such as reductions, shifts, or increases, in response to market or system conditions. Another form of demand response is a smart resource-load management strategy. Common benefits from demand response include a reduced environmental impact, improved integration of renewable energy, support to transmission and distribution infrastructure, and increase in energy reliability.
- A timeline of LADWP's demand response programs was shown, starting in 2014 with the Strategic Demand Response Implementation Plan which approved a demand response goal of 500 MW, then 2015 launch of the Commercial & Industrial Demand Response Program, taken over by internal LADWP staff in 2017. In 2019, a request for proposals for Residential Bring-your-own-thermostat (BYOT) was advertised through the Southern California Public Power Authority, and in 2020, the program was launched for residential and small commercial customers as the Power Savers Program. Currently in 2021, the LA100 Study has been completed, the Commercial and Industrial Program includes 58 participants with 35 MW of capacity, and the Power Savers Program is comprised of 35,000+ devices with 24 MW of capacity.
- The Power Savers program works in partnership between LADWP, the Southern California Public Power Authority, and Energy Hub, who was selected through a competitive process.

One-time incentives were given to participants through Amazon Gift Cards, for which demand response events could potentially occur between the June through October timeframe. Thus far, a total of 124 MW and 303 MWh in savings have been achieved over 7 events. Several achievements by the program include meeting targets for a 50% equity target, 17% stressed feeders, 36% buildings other than houses, and 27% apartments.

- Regarding commercial and industrial programs, a commitment of a minimum 100 kW of load reduction is required by participants. They will then be notified either two or 24 hours in advance of an event, which could occur between June 15 through October 15, from 1pm-5pm on the weekdays, for a maximum of 12 events of up to four hours each. Participant industries include entertainment studios, cold storages, manufacturing plants, and retail buildings, among others.
- Key demand response challenges discussed include customer recruitment through program awareness, outreach effort, and competing programs, as well as required infrastructure such as automation, interval meters, and adequate staffing.
- Moving forward, the cost is expected to trend downwards over the years from a ceiling of \$150/kW, spurring the growth of existing programs, development of automated demand response systems, and implementation of an electric vehicle demand response programs. The goal is to explore more demand response opportunities and promote a demand response culture in the City of Los Angeles.
- Major Themes from Advisory Group Member Discussion and Questions
 - What are the plans to replace all meters to smart meters? What are the challenges/opportunities to a transition?
 - *A: Over 5,000 were deployed in the past through the Smart Grid demonstration. Deployments are back on and over the next two years we hope to establish more smart meters. Communication is a challenge (fiber optic backbone), as we do not own equipment in certain areas and line of sight is not always available. Data management – how to pull data, when to pull data, and how to manage, will also be a challenge.*
 - Where/when can we see details on the future DR programs?
 - *A: LADWP's website on demand response shows more details on programs and different opportunities. www.ladwp.com -> Commercial -> Save Money -> Rebates & Programs -> Demand Response Program.*
 - Are advanced metering infrastructure (AMI) meters now required by code?
 - *A: As mentioned, it is currently under consideration. We also have automatic meter reading (AMR) meters that provide interval data, but not as dynamic, as there is usually a 24-hour delay. Most commercial customers have AMR, but as far as code requirements and deadlines, we do not have that knowledge here today. Perhaps the Metering team would be better able to address those questions.*
 - Is LADWP modeling the future relationship between avoided cost and price for incentive for each of the residential, commercial, and industrial sector as it moves towards expanded implementation?

- *A: At a very high-level, the LA100 Study results showed that we need to stay below costs of \$150/kW. So far we are under that, and as we move forward that cost is expected to decrease, thus it is crucial to grow the portfolio. Through the SLTRP process, LADWP will have a better idea of what the avoided costs will look like. In the past, gas peakers were built due to economics, but now we will be looking at different alternatives.*
- Interest in receiving a metering presentation with more information on distribution automation.
- Interest in seeing start-to-finish service for installation of resources such as rooftop solar, demand response, and EV charging stations, as many of the programs are complicated for the technically challenged.
- Questions about metering jobs impacted by transition to smart meters.
- Interest in seeing a robust multi-day demand response plan and program feed into the SLTRP scenarios, similar to that theorized by the LA100 Study, to keep costs down and potentially reduce in-basin hydrogen deployment.

6. 2022 SLTRP: Draft Scenario Matrix

- Jay Lim, LADWP Manager of Resource Planning, briefed the AG on poll results from AG Meeting #3.
- For previous poll question 1 (*Do the draft scenarios presented by LADWP today capture the full spectrum of the Advisory Group’s interests and priorities for the SLTRP process*), 40% of the AG voted yes, and 60% of the AG voted no.²
- For previous poll question 2 (*If you selected no, what additional scenarios or elements would bolster the draft scenarios presented by LADWP today?*), the high-level categories were broken down as follows²:
 - Risk Assessment (31%)
 - Path/Trajectory Towards Stated Goals (27%)
 - Rates (15%)
 - GHG Emissions (7.7%)
 - Green Hydrogen (7.7%)
 - Other (7.7%), including land-use considerations and single-scenario modeling
 - Customer Programs (4%)
- A more detailed breakdown of the categories, as well as poll responses² can be seen in the AG Meeting #3 presentation slides.
- Lim then went on to show a scenario matrix with three proposed scenarios: SB 100 (Reference Case), Balanced Decarbonization, and City Council Motion. A high-level overview of the scenarios is as follows:
 - SB 100 (Reference Case): represents the 100% clean energy by 2045 goal that is mandated by the State of California, in which the “100%” target is with respect to

² Comments and poll results shown are informal and should not be considered a representative nor complete illustration of the Advisory Group’s opinion at large.

retail electric sales only (does not include line losses) and allows up to 10% to be offset by renewable energy credits.

- Balanced Decarbonization: meets 100% clean energy by 2035 (a decade ahead of SB 100), and achieves 100% carbon-free with respect to generation (inclusive of line losses) by 2040 or whenever practically feasible. This allows up to 10% of the target to be met with renewable energy credits until green hydrogen is fully mature and deployed.
- City Council Motion: meets 100% carbon-free with respect to generation by 2035. This option does not allow renewable energy credits.

○ Major Themes from Advisory Group Member Discussion and Questions

- What cost of carbon emissions will you be using in your cost-effectiveness calculations? Also, do you use low, medium, or high?
 - *A: We are currently using the California Air Resources Board cap and trade price forecast for greenhouse gas emissions prices. We will be using the base and potentially a high cost.*
- Emphasis that bill costs, such as “total household energy costs” are more important than rates. Desire to see costs for fuel switching away from methane and gasoline.
- Desire to rename some of the scenarios.
- Questions on whether there will be a comparison to the 2017 SLTRP.
- Questions on whether the global supply chain crisis has affected LADWP distribution upgrade plans and orders for equipment such as transformers.
- Comments on how demanding there be zero natural gas usage in the interim period will limit the ability for L.A. to be optimally green during its transition to 100% clean energy.
- Comments on why the SLTRP would look at scenarios that do not achieve the L.A. City Council motion for 100% carbon-free energy by 2035.
- Comments on how hydrogen that is not derived from renewable energy, should not be considered.
- Desire to see all three scenarios have a cost and rate impact performed, so the public can see the true cost of the political goals, and to facilitate a real public discussion on feasible options that impact every household in terms of cost.
- Suggestion to build in-basin electrolyzers to produce green hydrogen from renewable electricity, and offer the surplus to refineries on an as available basis.
- Agreement by some AG members on seeing the SB 100 scenario as a baseline for comparison, as well as other applications of hydrogen.
- Desire to see a health impact analysis done, that takes into account detrimental effects to community health as a result of pollution and emissions.
- Desire by some AG members to only see scenarios that fit within the L.A. City Council motion for a 100% carbon-free by 2035 target, and work within those parameters to have multi-day demand response instead of green hydrogen.
- Can you confirm that the three scenarios will have customer bill impact analysis?
 - *A: Yes, we will do customer impact analysis in terms of rates and customer bill impacts.*
- Can LADWP provide a rationale for why hydrogen is present in all scenarios?
 - *A: Hydrogen is an eligible resource, but our modeling will select optimal levels based on reliability.*

7. 2022 SLTRP: Breakout Discussion Sessions and Polling²

- The AG then went into four breakout rooms with SLTRP staff and had the opportunity to ask questions and learn more about the scenarios, as well as provide input on what they think was still missing. Main elements identified by the breakout groups were then reported back for AG conversation at-large. These elements included:
 - Understanding equity impacts and impacts on low income ratepayers
 - Interest in potentially having more meetings with more opportunities to discuss and have true public dialogue
 - More discussion to ensure green hydrogen is better understood in the community, as well as an explanation of what “green” means, perhaps renaming to “fossil fuel-free”.
 - A timeline breaking down the projects that are part of the SLTRP.
 - All scenarios under consideration should meet the City Council motion
 - Inclusion of a no-combustion scenario

POLLING RESULTS²

Question #1: Do the draft scenarios presented by LADWP today capture the full spectrum of the Advisory Group's interests and priorities for the SLTRP process?

- Total Responses: 20 (not all Advisory Group members in attendance participated in the poll, and not all Advisory Group members attended the meeting)
- Yes: 4 (20%)
- No: 16 (80%)

Question #2: If you selected no, what additional scenarios or elements would bolster the draft scenarios presented by LADWP today? Please make the answers concise, and multiple answers can be submitted.

1. For clarity, questions on no-hydrogen scenarios are not hostility--it's about trying to identify whether alternatives are more cost-effective. You need more than one motion-compliant scenario to see those cost-effectiveness tradeoffs.
2. A very high DER scenario is important.
3. son asked for today, etc.). Those can be independent of the model work.
4. Use of customer storage to provide energy to grid.
5. Horizon of time for execution, of new infrastructure.
6. Western states power shortage.
7. Use of hydrogen for heavy duty transportation and cargo handling equipment.
8. Consider a scenario with stronger time-of-use rates to reduce demand for peak energy use.
9. Keep all three scenarios, but add one that models climate change degradation of renewable resources.
10. The Building ratio of GHG for LA seemed to be skewed on the very low side.
11. Costs to Residential and Commercial for Transition.
12. More discussion on transmission needs, and distribution needs, such that DWP considers the ability to create mini power stations throughout the city utilizing solar and battery.
13. More demand response discussion.
14. Impact on bills for low-income residents.
15. What is this hostility to hydrogen? I am mystified.

16. No inclusion of resilience in a future that leaves us vulnerable from power outages, and the resulting economic and health impacts of those. Also, Health has been ignored since the last stage was completed. Also, more on equity.
17. Compare to 2017 IRP.
18. Commercial and Residential electrification being a priority just like transportation.
19. additional scenarios that meet the 2035 target date that address the 100% target without power plants in basin. Specifically, multi-day response, DER, energy efficiency.
20. Technology scenarios.
21. Understanding reliability/resiliency tradeoffs.
22. Report impact on rates and bill pass-throughs related to PPA's in all scenarios.
23. High vs. moderate efficiency and EV
24. Keep the SB 100 Reference Case. Abandon the Balanced Decarb scenario because it doesn't comply with the City Motion. Add new scenarios that do comply and incorporate a no hydrogen scenario.
25. Only 2035 scenarios.
26. Incorporate comments from the stake holder into the plan.
27. Rename "balanced", that is a biased name.
28. Provide schedule and cost impacts related to the different technologies
29. Transmission centric.
30. No. Interested in plans for Port.
31. Only study 2035 scenarios.
32. Costs.

8. Wrap Up and Next Steps

- Next meeting will be on Wednesday, November 10, 2021 (10am-12pm) and will present improvements as well as additional discussion on potential modeling scenarios and the associated matrix.

Next Meeting: Wednesday, November 10, 2021; 10:00 am-12:00pm, WebEx Platform (Virtual)